



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930

April 20, 2022

Mr. Scott Flood
Chief Executive Officer
Blue Water Fisheries, LLC
PO Box 159
Contoocook, NH 03229

Subject: Request for submittal of additional information to facilitate efficient processing of multiple Federal permitting and authorization actions regarding the Blue Water Fisheries, LLC, proposed marine aquaculture facility in Federal waters of the Gulf of Maine

Dear Mr. Flood:

NOAA's National Marine Fisheries Service (NMFS) Greater Atlantic Regional Fisheries Office (GARFO), the U.S. Environmental Protection Agency (EPA) Region 1, and U.S. Army Corps of Engineers (USACE) New England District are the Federal agencies, hereafter referred to as "the interagency workgroup," coordinating the permitting process for your proposed offshore aquaculture project. The interagency workgroup compiled a list of additional information we need as part of the environmental review process required to comply with the National Environmental Policy Act (NEPA). In addition, this information is necessary to obtain required authorization from the USACE pursuant to section 10 of the Rivers and Harbors Act (RHA), and the EPA's National Pollutant Discharge Elimination System (NPDES) program under section 402 of the Clean Water Act (CWA). The requested information will also support coordination efforts with the New England Fishery Management Council (NEFMC) to ensure your project is compatible with the provisions and objectives of the NEFMC's Atlantic Salmon Fisheries Management Plan, and other applicable Federal laws and consultations required prior to the issuance of Federal agency authorizations for your proposed project.

The interagency workgroup requests the early submission of the information listed in the enclosure to facilitate an efficient permitting process and allow the interagency workgroup to coordinate more effectively on a variety of complex issues associated with your project. We understand that some of the requested information may not currently be available, is still in draft form, and/or may change as a result of new information derived from the environmental review and authorization process, or other factors. Regardless, we encourage you to provide any available draft information and, to the best of your ability, an anticipated timeline for the submission of all currently unavailable information. Please also note if any of the requested information is not expected to be available and the associated constraint.

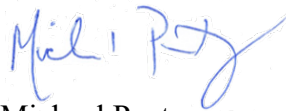
My office has volunteered to send this request for information on behalf of the interagency workgroup to help facilitate efficiency; however, each Federal agency is required to follow their



respective statutes and their own implementing regulations when permitting and authorizing a proposed project. The interagency workgroup anticipates the need to request additional information in the future as part of each agency's permitting, authorization, consultation, and evaluation process. Documents containing confidential business information will be protected from release to the extent authorized under applicable law. Please clearly label any confidential business information and submit the information as a separate file(s). All documentation can be submitted via [google drive](#).

Thank you for your continued cooperation during this process. Should you have any questions about this information request, please contact Christopher Schillaci at Christopher.Schillaci@NOAA.gov.

Sincerely,



Michael Pentony
Regional Administrator

Enclosure: Information Request
Copies Furnished:
Nathan Chien, Eric Nelson, EPA
Richard Kristoff, USACE

Information Request

Supplemental Information to Support Federal Agency Permitting, Authorizations, Consultations,
and Environmental Evaluations for Blue Water Fisheries, LLC's Proposed Marine Aquaculture
Facility in Federal Waters of the Gulf of Maine

1. Baseline Environmental Information of the Proposed Project Area(s)

- a. Supporting information that aided in your selection of the proposed site, and any analysis showing potential interactions at the site between the facility and surrounding environment, potential use conflicts, impacts to navigation, and any alternative sites considered and rejected (e.g., A copy of the most recent version of the *CASS Technical Report Site Suitability Analysis: Blue Water Fisheries LLC, Northeastern Federal Waters*).
- b. Information on the proposed preferred site(s), and any identified alternative site(s), related to bathymetry, water quality, archeological resources, hydrographic and geophysical descriptions, and the highest resolution maps/data available that outline seafloor characteristics, cultural resources, and surrounding sensitive habitats (e.g., known hard bottom substrates, corals, fish spawning areas, etc.).
- c. Information related to plans to conduct on-site surveys, including the proposed timing of any such surveys, and the proposed survey design.

2. Facilities Design and Materials Information

- a. Information on the design of the net pens and any materials that will be used as part of facility operations within or in contact with the marine environment.
- b. Net pen and mooring structural report that contains: Engineering design with assumptions, and the basis for such assumptions (i.e. report from a licensed engineer); detailed drawings in plane and cross-section views; net pen and mooring configuration; spacing between pens and other gear; pen materials and mesh size; manufacturer information for all gear; anchor types; specifications of all components of the system such as cable, chain, bridle, buoys, and rope; tension requirements; pen quantity; storm event calculations; etc.
 - i. Additional details that the report should address include, but are not limited to:
 1. Will the net pens be assembled entirely onsite? If not, where will assembly take place?
 2. What is the design life of the net pens?
 3. What kind of structural maintenance is required or planned for the net pens?
 4. What magnitude of storm event/wave energy are the net pens able to withstand without rupture?
 5. Are there any contingency plans in place for structural damage to the pens themselves? If so, what are they?
 6. Are there any planned entanglement prevention procedures? If so, what are they?

7. Other than anchoring devices, will there be any equipment (e.g., nets or cage materials) stowed on the seafloor itself for any period of time?
 8. Will predator nets be used in addition to grow-out nets?
 9. Information on noise and light production associated with net pen and anchoring system construction.
 10. What is the mechanism/process for raising and lowering the pens and what percentage of time do you expect pens to be in the various proposed positions?
 11. Assessment of extreme wave impacts to the structure in both the raised and lowered positions. What wave forces are expected and will the connections, etc. have the capacity to withstand these forces without breaking apart.
 - a. This will require an extremal analysis of wave conditions at the site including return period analysis, by direction, of wave height and period.
 12. Information on the ability for all proposed structures to withstand predicted future climate conditions?
- c. If at any stage of the proposed operation a hatchery facility will be needed, provide information related to the proposed hatchery facility including, but not limited to:
- i. Hatchery design (e.g. flow-through or recirculating system).
 - ii. Will the hatchery discharge directly to a Water of the United States or indirectly through a Publicly Owned Treatment Works?
 - iii. Will the hatchery be located in proximity to protected areas or environmental justice populations?
 - iv. Locations being considered (i.e., town, state).

3. Major Construction and Operation Milestones

- a. Information on the expected start and duration of construction and operational milestones. The timeline can be relative to the completion of environmental permitting issuances, e.g., “construction will begin 3 months from the issuance of an NPDES permit.” Date ranges are acceptable. These events should include, at a minimum:
 - i. Construction activities including equipment purchase, fabrication, delivery, and installation;
 - ii. Operation schedule;
 - iii. Sourcing suitable fish stocks to grow out, harvest, and sell;
 - iv. Compliance with all other applicable statutes;
 - v. Any education and outreach activities; and
 - vi. Estimate of complete project life cycle.

4. Stocking and Harvesting Procedures

- a. Information related to fish production at all stages (e.g., production plan), including information on the source of fish germplasm/smolt, stocking and

harvesting schedule and processes, tiered production; cage fallowing; average and maximum annual fish production; fish size and quantity stocked over time; anticipated fish mortality; estimated biomass at a daily and monthly frequency for the 5-year NPDES permit cycle; and fish stocking, grading and harvesting methods.

- b. Additional information on fish species, including: Source of broodstock (if applicable); hatchery and/or fingerling rearing location; filial generation; and genetic information for each species.
- c. Fish harvest SOPs for seining, culling, bleeding, and packing for transport to shore. Offloading and transport to processing facilities for further fileting, value added procedures, etc., before shipping to wholesale distributors.
- d. Fish rearing SOPs for culture in submerged marine net pens, such as mechanical feeding, underwater monitoring, monitoring, and controlling environmental parameters, such as dissolved oxygen and flow through the cages. Additionally, fish health and routine fish culture procedures, mortality removal and predator control.
- e. Containment Management System plan to minimize escapes of farmed individuals from the facility.
- f. Information on noise and light production associated with stocking and harvesting activities and when the operation is not actively being tended.

5. Vessel Information

- a. Information on the construction and support vessel(s) (construction/installation, harvest, and feed barge(s)). This should describe how all vessels will access and operate in the project area for each stage of the project. This information should include vessel size and draft, quantity of vessels, engine size, quantity of personnel, use during installation and facility operation, vessel noise and light production, expected vessel route, frequency of travel to and from the farm, speed of vessel when transiting, generator size and usage, support vessel habitation, management of overboard discharge materials (e.g., solid waste, food, and marine sanitation device utilization), and information about transport or harvest discharges.

6. Materials Storage

- a. Describe the storage and use of oil, gasoline, or other hazardous materials related to facility operations. If petroleum products are to be used, provide a spill prevention plan. Please provide information on the storage of feed and fish culture products, such as medicated special feed and therapeutants, disinfection chemicals.

7. Pollution Prevention Planning

- a. Describe planned preventative measures (structural and non-structural) to minimize the discharge of pollutants (including but not limited to fish feed, excrement, mortalities, escapes, drug/chemicals) to the receiving water. A

detailed description of the feeding and feed monitoring processes should be included. Additional topics include:

- i. Feed characteristics: Manufacturer of the feed; feed brand; feed ingredients (including forage fish composition if applicable); nutrient analysis; sinking rate; digestibility (if available); feed pellet size at varying fish sizes; feed rates; and estimated feed conversion ratio.
 - ii. Feeding and feed distribution methods, including estimated feed loss and any practices or technology that will be used to control the amount of feed consumption and minimize feed waste.
 - iii. All cleaning and maintenance procedures that are expected to be used including chemicals, cage maintenance procedures, position of cage during maintenance, time to maintain each cage, structural maintenance practices, and cleaning frequency and schedules.
 - iv. For any planned cleaning of organic fouling organisms, what are the processes and equipment involved in such cleaning? Do they contain any potential sources of pollutants (e.g., anti-foulants, copper compounds, micro-plastics, etc.)?
 - v. Decommissioning procedures for the termination of facility operations.
 - vi. Does the applicant have any control plans to prevent fish escape?
 - vii. Will there be any processing of harvested fish at sea (including gutting or release of process water)?
 - viii. Any draft plans or information on planned environmental monitoring, protected species monitoring and reporting, facility damage prevention and control practices used during emergency events (e.g., hurricanes, harmful algal blooms, gear malfunction, cage loss, mass fish mortality events), best management practices (e.g., material storage, marine debris loss prevention, removal, transport and disposal of fish mortalities, training, recordkeeping); and quality control practices.
 - ix. Include any additional information that may be relevant to the discharge of pollutants and how the operations will prevent and/or mitigate any degradation to the ocean environment.
- b. Is an increase in turbidity expected? If no, why not? If yes, describe the causes, the extent of the effects, and the duration.

8. Drugs, Chemicals, Additives, and Other Discharges

- a. Describe the magnitude, frequency, and duration of the planned use of any drugs or vaccines that would be discharged to the ocean environment as part of facility operations. This should include how and where drugs will be administered to fish (e.g., injection, through feed, bath immersion, etc.), whether drugs have been approved by FDA for the intended purpose, or are investigational new animal drugs (INADs). Additional questions include:
 - i. Are there withdrawal periods for these drugs that would dictate when fish can be sold, and will wild fish stocks be able to consume this medicated feed?

- ii. Are any other chemicals and/or additives going to be used and discharged in the vicinity of the site?

9. Current and Wave Analysis

- a. *(This specific data request is outlined here for the applicant's benefit, but will be addressed through a separate data request later in the permitting process)*
Information on how ocean currents and waves will disperse pollutants from the facility. Effluent deposition and chemical attenuation of soluble pollutants needs to be characterized. Modeling and/or dye studies would fulfill the requirements of this subsection. Any pre-permit modeling should identify areas of uncertainty that may need to be further characterized through permit monitoring requirements. One major goal of this analysis is the appropriate identification of the number and location of monitoring points. In addition, EPA seeks to understand the distance from the net pens where complete mixing of the effluent with the ocean water would occur, and where settleable solids are likely to accumulate on the seafloor.

10. University of New Hampshire Lumpfish Research

- a. Project overview and research objectives for the University of New Hampshire Lumpfish Research. Description of transfer and handling procedures for lumpfish. Additional questions include:
 - i. Are all the pens going to have lumpfish?
 - ii. Are there control pens for the no parasite control scenario?
 - iii. Will there be any seasonal variation in stocking?
 - iv. What specific research questions is this project answering?
 - v. Will the project last the entire net pen lifecycle?
 - vi. What is the fate of the lumpfish? E.g., will they all be slaughtered, and the gut-content studied? Are just some sampled? Are all released?
 - vii. Are there alternative parasite control strategies in the event this research project is terminated?
 - viii. Will you be using native sources of lumpfish?

11. Sensitive Species and Habitat Interactions

- a. Potential interactions with sensitive species and habitats during construction, installation, and operations/maintenance phases should be described. All measures to avoid, minimize, and mitigate each identified potential interaction should be fully described. Will there be monitoring to identify number and types of species interactions? Will strike avoidance measures be employed on support vessels?
- b. Describe any planned preventative measures to deter interactions between the facility and vessels and protected and/or sensitive species, including, but not limited to, marine mammals, sea turtles, fish, and seabirds. Describe any measures to prevent interactions with gear; measures to prevent or deter predation.

- c. Information on plans, including frequency/speed, with which NMFS will be notified upon sightings of listed species. Is this to be a quarterly report, or within 24 hours of sighting?
- d. Potential interactions with sensitive life history stages of federally managed species (e.g., Atlantic cod spawning) and NOAA-trust resources (e.g., lobster) that occur within, or adjacent, to the project area should be identified and described. If impacts are expected, will compensatory mitigation be used? If no, why not? Describe plans for mitigation and how this will offset impacts to EFH. Include a conceptual compensatory mitigation plan, if applicable.
 - i. Please see: [*GARFO Endangered Species Act Needs for Aquaculture Projects in the U.S. Atlantic.*](#)

12. Additional Information

- a. Timing of requisite communication with NOAA and USCG to issue Notice to Mariners, update nautical charts, and establish appropriate aids to navigation for vessel traffic.
- b. A schematic profile on one plan provided shows a depth of 60 meters, but another plan shows the pens in around 80 meters of water. This should be reconciled.
- c. Submitted project plans include green polygons, as well as locations for additional sites (1, 4-8). What is the significance of the polygons and are there planned activities at other sites?